

AMSAT News Service Weekly Bulletins

Issue: ANS-323

Date: 2017-11-19

Sources: amsat-ans-2017-ans-323-weekly-hyperkitty-5ac6a09152.txt

AMSAT NEWS SERVICE

ANS-323

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on <http://www.amsat.org> publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

In this edition:

- * RadFxSat (Fox-1B) Launched, Designated AMSAT-OSCAR 91 (AO-91)
- * ESA Announcement for CubeSat Team Concurrent Engineering Workshop
- * Australian Amateurs do first HamTV Telebridge outside of Europe
- * UPDATE - Polish Amateur Radio Union Award for ARISS SSTV Reception
- * December 20 Launch for HA-1 CubeSat with FM transponder and SSTV
- * HamSCI Announces Workshop - Posts Survey
- * Satellite Shorts From All Over

SB SAT @ AMSAT \$ANS-323.01

ANS-323 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 323.01

From AMSAT HQ KENSINGTON, MD.

DATE November 19, 2017

To All RADIO AMATEURS

BID: \$ANS-323.01

RadFxSat (Fox-1B) Launched, Designated AMSAT-OSCAR 91 (AO-91)

The Delta II rocket carrying RadFxSat (Fox-1B) launched at 09:47:36 UTC on November 18, 2017 from Vandenberg Air Force Base, California.

Following a picture-perfect launch, RadFxSat was deployed at 11:09 UTC. Then the wait began. At 12:12 UTC, the AMSAT Engineering team, watching ZR6AIC's WebSDR waterfall, saw the characteristic "Fox Tail" of the Fox-1 series FM transmitter, confirming that the satellite was alive and transmitting over South Africa. Shortly after 12:34 UTC, the first telemetry was received and uploaded to AMSAT servers by Maurizio Balducci, IV3RYQ, in Cervignano del Friuli, Italy. Initial telemetry confirmed that the satellite was healthy.

After confirmation of signal reception, OSCAR Number Administrator Bill Tynan, W3X0, sent an email to the AMSAT Board of Directors designating the satellite AMSAT-OSCAR 91 (AO-91). Bill's email stated:

"RadFxSat (Fox-1B) was launched successfully at 09:47 UTC today November 18, 2017 from Vandenberg Air Force Base in California and has been received by several amateur stations.

RadFxSat (Fox-1B), a 1U CubeSat, is a joint mission of AMSAT and the Institute for Space and Defense Electronics at Vanderbilt University. The Vanderbilt package is intended to measure the effects of radiation on electronic components, including demonstration of an on-orbit platform for space qualification of components as well as to validate and improve computer models for predicting radiation tolerance of semiconductors.

AMSAT constructed the remainder of the satellite including the spaceframe, on-board computer and power system. The amateur radio package is similar to that currently on orbit on AO-85 with an uplink on 435.250 MHz (67.0 Hz CTCSS) and a downlink on 145.960 MHz. Experiment telemetry will be downlinked via the DUV subaudible telemetry stream, which can be decoded using the FoxTelem software.

RadFxSat (Fox-1B) was sent aloft as a secondary payload on the United Launch Alliance (ULA) Delta II rocket that transported the JPSS-1 satellite to orbit. RadFxSat (Fox-1B) is one of five CubeSats making up this NASA Educational Launch of Nanosatellites (ELaNa) XIV mission, riding as secondary payloads aboard the JPSS-1 mission.

Since RadFxSat (Fox-1B) has met all of the qualifications necessary to receive an OSCAR number, I, by the authority vested in me by the AMSAT President, do hereby confer on this satellite the designation AMSAT-OSCAR 91 or AO-91. I join amateur radio operators in the U.S. and around the world in wishing AO-91 a long and successful life in both its amateur and scientific missions.

I, along with the rest of the amateur community, congratulate all of the volunteers who worked so diligently to construct, test and prepare for launch the newest amateur radio satellite.

William A. (Bill) Tynan, W3XO
AMSAT-NA OSCAR Number Administrator"

AMSAT Engineering reminds stations that the satellite will not be available for general use until the on-orbit checkouts are complete. Please continue to submit telemetry to assist the Engineering team in completing the commissioning process.

[ANS thanks Paul, N8HM, for the above information]

ESA Announcement for CubeSat Team Concurrent Engineering Workshop

Dreaming of flying a satellite into space but not sure how? Wonder no more! The ESA Education Office and ESA's Systems and Concurrent Engineering Section have the perfect workshop for you. We are currently looking for university students who would like to participate in ESA Academy's first Concurrent Engineering Workshop dedicated to CubeSats. The 4-day workshop will be organised between 16 and 19 January 2018 at the Training and Learning Centre in ESEC, Belgium.

In concurrent design, all stages of a satellite design take place simultaneously, through the direct collaboration of engineers and scientists from different disciplines in a dedicated and specially equipped facility.

The "CubeSats Concurrent Engineering Workshop" will introduce student teams to the concurrent design of a CubeSat mission. The workshop can help to better prepare those universities that are planning to embark on a Cube-

Sat project or are at the early stages of one. Teams wishing to participate do not need to be at an advanced stage in their CubeSat project. They can be at a conceptual and/or preliminary phase of their CubeSat design.

The deadline for applications is 4 December 2017, 23:59 CET.

Application requirements, program overview, and more information can be found on-line at: <http://tinyurl.com/ANS-316-ESA-Workshop> (<http://www.esa.int>)

[ANS thanks the European Space Agency for the above information]

Australian Amateurs do first HamTV Telebridge outside of Europe

Led by Shane, VK4KHZ in Queensland who handled the audio on 2m. and video for a telebridge contact between the ISS and 3 Italian schools on 11 Nov. Four stations across Australia joined together to "chain" the live video coming down from the ISS on 2.4 Ghz.

As the ISS approached Australia from the west Martin VK6MJ in West Australia was the first to receive the video signal down from Paolo, IZ0JPA and held the signal till Joe VK5EI in Adelaide picked it up then onto Tony VK5ZAI in Kingston SE South Australia finally as the ISS headed N-E over Queensland Shane picked up the video signal in Glenden while he was handling the audio for the linkup.

The video from the 4 Australian hams was streamed live to the BATC site in GB. where it was patched together to form one long video transmission so the public could watch as Paolo answered the Italian students questions.

The URL for the British Amateur Radio Club is: <https://ariss.batc.tv/hamtv/>

[ANS thanks Tony, VK5ZAI, for the above information]

UPDATE - Polish Amateur Radio Union Award for ARISS SSTV Reception

UPDATE November 5 - Armand SP3QFE advises that the deadline to apply for your ARISS SSTV Reception Award has been extended to December 30, 2017 at 23:59 UTC. (see below for text of Armand's original bulletin for details of the award).

Armand, SP3QFE reported the Polish Amateur Radio Union (PZK), in cooperation with ARISS and S.P. Korolev Rocket and Space Corporation ENERGIA, offer an electronic Award to Amateurs who received and decoded at least one SSTV series 7 image during the 20th Anniversary of ARISS commemorative 2017 a Slow Scan Television (SSTV) event from the ISS between July20 and July 24.

The SSTV pictures transmitted during this event were series #7 of 12 of images covering the history of Amateur Radio on the

International Space Station (ARISS) over the last 20 years.

To apply for the award first upload your image(s) to the ARISS SSTV Gallery at:

http://www.spaceflightsoftware.com/ARISS_SSTV/index.php

The Award rules and a link to the on-line application form are on-line at: <http://ariss.pzk.org.pl/sstv/> The deadline to apply is September 30, 2017 at 23:59 UTC.

Note: If you have already uploaded images to the ARISS SSTV Gallery you do not need to re-submit the image and only need to complete the application form.

[ANS thanks Armand, SP3QFE for the above information]

December 20 Launch for HA-1 CubeSat with FM transponder and SSTV

The IARU has announced frequency coordination has been completed for HA-1, a 2U CubeSat developed by the Teenagers Amateur Radio Center of Activity in Huaian, China. HA-1 is planned for launch on December 20.

HA-1 will be mainly used for teenagers in Huaian to carry out activities related with amateur radio and aerospace science education. The cubesat is equipped with amateur radio repeater and SSTV(Slow Scan Television) component, which is to validate still image transmission in narrowband voice channel.

There is an SSTV beacon, which puts Date/Time/Location information/temperature etc on a SSTV picture. Amateurs worldwide can also use HA-1 to test SSTV via the cubesat.

Uplink: 145.930 MHz FM
Downlink: 436.950 MHz FM
Telemetry: 437.350 MHz 9k6 BPSK

[ANS thanks the IARU for the above information]

HamSCI Announces Workshop - Posts Survey

HamSCI - the Amateur Radio citizen science initiative - has announced a 2-day workshop February 23-24 at New Jersey Institute of Technology (NJIT) in Newark. HamSCI's Nathaniel Frissell, W2NAF, has posted a survey to gauge interest and potential attendance.

"We are inviting all hams and scientists interested in ham radio science," Frissell said. "This aim of this workshop is to foster collaborations between the ham radio and the space science and space weather research communities through presentations, discussions, and demonstrations. This year's meeting will focus on solar eclipse analysis, ham radio data sources and databases, and the development of a 'personal space weather station.'"

Full details and access to the survey are available on-line:
<http://tinyurl.com/ANS-316-HamSCI-Workshop> (arrl.org)

[ANS thanks the ARRL and HamSCI for the above information]

Satellite Shorts From All Over

+ Amateur-Satellite Service mentioned in article by @IARU_President Tim Ellam

VE6SH about International Amateur Radio Union #IARU and CCIR/ITU-R.

Download

PDF of latest #ITU News Magazine 04/2017 (see page 55):

<http://www.itu.int/en/itu-news/Pages/default.aspx>

(via AMSAT-UK)

+ Jose, PW8PM, posted a YouTube video of his satellite operation from The four-corner grid square at FH88/89/98/99 on November 12. Jose worked several stations in South and North America via A0-7 Mode B. The direct YouTube link is: <https://www.youtube.com/watch?v=l5IfFbb48qk>

+ Damon, WA4HFN, says interest is growing in the satellite operating awards offered by the Squirt-The-Birds Group. This week Damon says congratulations

are due to Adrian Liggins, VA3NNA, for earning Got Grids? #18. These awards

are free and we at Squirt the Birds support AMSAT NA.

Go to www.squirtthebirds.com for more info.

+ Amateur-Satellite Service mentioned in article by @IARU_President Tim Ellam

VE6SH about International Amateur Radio Union #IARU and CCIR/ITU-R.

Download

PDF of latest #ITU News Magazine 04/2017 (see page 55):

<http://www.itu.int/en/itu-news/Pages/default.aspx>

(via AMSAT-UK)

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KT4TZ
kt4tz at amsat dot org